# Rule WLM003:    The service policy was changed

**Finding:**    CPExpert has detected that the service policy was changed at the time shown by this rule.

**Impact:**    This finding should be viewed a LOW IMPACT, MEDIUM IMPACT, or HIGH IMPACT on the performance of your computer system.  The level of impact will depend upon (1) the number of changes and (2) whether service classes were altered in the new service policy.

**Logic flow:**    This a basic finding.  There are no predecessor rules.

**Discussion:**    Users communicate their service requirements for workloads by defining a *Service Policy* to the Workload Manager.  A service policy is simply a "named" collection of service classes and their associated performance goals and (optionally) processing boundaries for the address spaces associated with the service classes.

A service policy is created using the Workload Manger ISPF panel.  Once the service policy is created, it is stored in the couple data set.  The policy can then be activated by the Workload Manager ISPF application *Policy Selection List* panel.  The policy can also be activated by an operator issuing the VARY command and specifying the name of the new policy (for example, V WLM,POLICY=newpolicy).

A policy applies to a sysplex.  Once a policy is activated, the definitions contained in the policy remain in effect for the duration of the IPL.  Although part or all of the policy may be overridden by a different policy, any definition not overridden will remain in effect.

There are three performance-related effects inherent in a policy change:

• The Workload Manager and System Resources Manager must begin collecting new statistics to describe the new service policy. Consequently, a relatively long time may be required for the WLM and SRM to again make decisions about managing system resources.

• Any service class affected by the policy change will be "reinitialized" with respect to the service accumulated and all address spaces will in the service class will automatically be reassigned to Period 1 (if multiple periods exist).  This effect may harm performance in an interactive environment.  Address spaces which accumulate large amounts of system resources may conflict with interactive address spaces until the

address spaces consuming large amounts of system resources accumulate sufficient service units to again move to lower service class periods.

- RMF creates interval records (SMF Type 72 records) to record the information accumulated under the old service policy. RMF will again write interval records at the normal end of the RMF measurement interval. Thus, two sets of interval records will be written by RMF when a service policy change occurs: one set covering the interval from the last normal RMF recording interval up to the service policy change and one set covering the interval from the new service policy activation until the next normal RMF recording interval. Data analysis (by either CPExpert or an analyst) during these short periods must be viewed with caution.

The following example illustrates the output from Rule WLM003:

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RULE WLM003:  THE SERVICE POLICY WAS CHANGED

   CPExpert has detected that a service policy change occurred in the below
   measurement intervals.  When the service policy is changed, RMF creates
   interval records for data collected up to that point.  RMF then will
   create another set of interval records when the normal measurement
   interval ends.  Thus, two sets of RMF data were created during the below
   measurement interval.  Data analysis for this period must be viewed with
   caution, as some of the calculations may be distorted by the short
   measurement intervals.

   EFFECTIVE TIME OF CHANGE        OLD SERVICE POLICY       NEW SERVICE POLICY
    07DEC1994:11:29:05                  HPTSPOL1                 HPTSPOL1
```

In the above example, the service policy **name** did not change. However, CPExpert detected that the service policy activation date/time (SMF Type 72 variable R723MTPA) had changed, indicating that the service policy had been activated at the indicated time. The active service policy can be copied to a temporary data set, the policy in the temporary data set can be changed, the changed policy installed in the couple data set, and the policy then activated. Thus, a change in the policy activation date/time signals that the policy itself has changed, regardless of whether the name changed.

**Suggestion:** There are no suggestions associated with this finding. CPExpert produces the information to alert you to be cautious about the analysis performed.

**Reference**: MVS Planning: Workload Management
MVS/ESA(SP 5): Chapter 8: Defining Service Classes and Performance Goals

OS/390 (V1R1):     Chapter 8: Defining Service Classes and Performance Goals
OS/390 (V1R2):     Chapter 8: Defining Service Classes and Performance Goals
OS/390 (V1R3):     Chapter 8: Defining Service Classes and Performance Goals
OS/390 (V2R4):     Chapter 8: Defining Service Classes and Performance Goals
OS/390 (V2R5):     Chapter 8: Defining Service Classes and Performance Goals
OS/390 (V2R6):     Chapter 8: Defining Service Classes and Performance Goals
OS/390 (V2R7):     Chapter 8: Defining Service Classes and Performance Goals
OS/390 (V2R8):     Chapter 8: Defining Service Classes and Performance Goals
OS/390 (V2R9):     Chapter 8: Defining Service Classes and Performance Goals
OS/390 (V2R10):    Chapter 8: Defining Service Classes and Performance Goals
z/OS (V1R1):       Chapter 8: Defining Service Classes and Performance Goals
z/OS (V1R2):       Chapter 8: Defining Service Classes and Performance Goals
z/OS (V1R3):       Chapter 8: Defining Service Classes and Performance Goals
z/OS (V1R4):       Chapter 8: Defining Service Classes and Performance Goals     |

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